CLAIMS

I claim:

1. A sputtering target, comprising:

a core material; and

a surface material coupled to the core material, wherein the surface material comprises at least two indentations that form a collimating topography.

2. The sputtering target of claim 1, wherein the core material and the surface material comprise the same chemical component.

3. The sputtering target of claim 2, wherein the chemical component comprises copper, aluminum, tungsten, titanium, zirconium, cobalt, aluminide, tantalum, magnesium, lithium, silicon, manganese, iron or any combination thereof.

4. The sputtering target of claim 3, wherein the component comprises copper, aluminum, tungsten, titanium, zirconium, cobalt, tantalum, aluminide or a combination thereof.

5. The sputtering target of claim 1, wherein the , at least two indentations comprises a macroscale modification.

6. The sputtering target of claim 5, wherein the macroscale modification comprises a circular wave contour.

7. The sputtering target of claim 1, wherein the at least two indentations comprises at least one microdimple.

8. The sputtering target of claim 7, wherein the at least one microdimple comprises a circular closed loop opening.

9. The sputtering target of claim 7, wherein the at least one microdimple comprises a hexagonal closed loop opening.

10. The sputtering target of claim 1, wherein the at least two indentations comprises a macroscale modification and at least one microdimple.

11. A method of forming a self-collimating sputtering target, comprising:

providing a core material;

providing a surface material;

coupling the core material to the surface material to form a sputtering target; and

forming at least two intentional indentations in the surface material, wherein the indentations form a collimating topography.

12. The method of claim 11, wherein providing the core material and providing the surface material comprise providing the same chemical component.

13. The method of claim 12, wherein the chemical component comprises copper, aluminum, tungsten, titanium, cobalt, aluminide, tantalum, magnesium, lithium, silicon, manganese, iron or any combination thereof.

14. The method of claim 13, wherein the component comprises copper, aluminum, tungsten, titanium, cobalt, tantalum, aluminide or a combination thereof.

15. The method of claim 11, wherein forming at least two intentional indentations in the surface material comprises forming a macroscale modification.

16. The method of claim 11, wherein forming at least two intentional indentations in the surface material comprises forming a circular wave contour.

17. The method of claim 11, wherein forming at least two intentional indentations in the surface material comprises forming at least one microdimple.

18. The method of claim 17, wherein forming the at least one microdimple comprises forming a circular closed loop opening.

19. The method of claim 17, wherein forming the at least one microdimple comprises forming a hexagonal closed loop opening.

20. The method of claim 11, wherein forming at least two intentional indentations in the surface material comprises forming a macroscale modification and at least one microdimple.

21. A method of forming a uniform film on a surface, comprising:

providing a self-collimating sputtering target;

providing a surface;

placing the surface at a distance from the self-collimating sputtering target;

bombarding the self-collimating sputtering target with an energy source to form at least one atom; and

coating the surface with the at least one atom.

22. A film formed from the sputtering target of claim 11.

23. A film formed by the method of claim 21.

24. A component formed by the sputtering target of claim 11.

25. A component incorporating a film formed by the method of claim 21.

26. A capacitor formed by the sputtering target of claim 11.

27. A capacitor incorporating a film formed by the method of claim 21.